

**U.S. FISH AND WILDLIFE SERVICE AND U.S. BUREAU OF RECLAMATION**

**WATER YEAR 2019 ACCOUNTING  
FISHERY AND WATER QUALITY CONTROL PLAN ACTIONS**

**February 22, 2020**

**BACKGROUND**

Pursuant to section 3406(b)(2) of the Central Valley Project Improvement Act (CVPIA), the Secretary of the Interior must:

dedicate and manage annually eight hundred thousand acre-feet of Central Valley Project yield for [1] the primary purpose of implementing the fish, wildlife, and habitat restoration purposes and measures authorized by this title; [2] to assist the State of California in its efforts to protect the waters of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary; and [3] to help meet such obligations as may be legally imposed upon the Central Valley Project under State or Federal law following the date of enactment of this title, including but not limited to additional obligations under the Federal Endangered Species Act.

The Department of the Interior (Interior) manages (b)(2) water consistent with its May 9, 2003 (b)(2) Policy and December 17, 2003 (b)(2) Guidance and relevant case law, including the Ninth Circuit Court's decision in Bay Inst. of San Francisco v. United States, 87 Fed. Appx 637 (2004) (hereinafter "2004 Decision"), confirming Interior's discretion to give effect to the "hierarchy of purposes" in Section 3406(b)(2), and the Ninth Circuit's recent decision in San Luis & Delta Mendota Water Authority v. United States, 672 F.3d 676 (2012) (hereinafter "2012 Decision"), affirming the District's Court's memorandum opinion in San Luis & Delta Mendota Water Authority v. Dept. of the Interior, 1:97-cv-6140, 1:98-cv-5261 OWW DLB (E.D. Cal. Sept. 19, 2008) (hereinafter SLDMWA).

In SLDMWA, Judge Wanger stated that the "primary purpose" of CVPIA Section 3406(b)(2) "includes all those fish and wildlife restoration activities specifically described in section 3406(b)," including "water dedicated to accomplish the anadromous fish doubling goal set forth in section 3406(b)(1)" and "water needed to accomplish any of the other specifically enumerated programs listed in section 3406(b)(2). SLDMWA, at 43 (underline in original). Judge Wanger also recognized that some WQCP and/or ESA actions "may serve the primary purpose of the CVPIA." Id. at 47. Thus, "if an action taken under the WQCP and/or ESA predominantly contributes to one of the primary purpose programs (e.g., fish doubling), it must be counted toward the 800,000 AF limit." Id. at 48. In so doing, Judge Wanger recognized that there may be some "primacy" to section 3406(b)(1) in relation to other stated purposes of section 3406(b), but he did not rule on that question. Id. at 45.

As explained in Interior's May 2003 policy, "actions" in the context of (b)(2) accounting are computed increases in Central Valley Project (CVP) releases and decreases in CVP exports relative to hypothetical baseline operations. The hypothetical baseline operations reflect how the CVP would have been

operated experiencing WY 2019's hydrology under the regulatory environment that existed at the time CVPIA was passed.

The CVP began Water Year 2019 on October 1, 2018 with relatively high storage levels in Trinity, Shasta, Folsom, and New Melones reservoirs, ranging from 100% to 135% of the 15-year average. Subsequent precipitation in the winter and spring was above average, and annual inflows to the CVP reservoirs ranged from 133% to 153% of the 15-year average. In the 2019 water year, the Sacramento River basin and the San Joaquin River basin were both classified as Wet, using D-1641 year type classifications. Consistent with Section 3406(b)(2) of the CVPIA and Interior's May 2003 (b)(2) Policy, the total (b)(2) water allocation was 800 thousand-acre feet (TAF) during the 2019 water year.

CVP operations during the 2019 water year were subject to implementation of two biological opinions: (1) the United States Fish and Wildlife Service (FWS) Biological Opinion (BO) on the Coordinated Operations of the CVP and the State Water Project (SWP) for the protection of federally-listed delta smelt, issued in December 2008 (FWS BO), and (2) the National Marine Fisheries Service (NMFS) BO on the Long-term Operations of the CVP and SWP for the protection of listed salmonids and Green Sturgeon, issued in June 2009 (NMFS BO). Both biological opinions included a reasonable and prudent alternative (RPA) to avoid jeopardy to the subject species.

In water year 2019, the 800 TAF (b)(2) allocation was utilized for primary purpose fish actions, Endangered Species Act (ESA) requirements, and/or Water Quality Control Plan (WQCP) requirements. The purpose of this document is to explain Interior's final accounting of fish actions covered by CVPIA Section 3406(b)(2) in water year 2019. The first attached table, "Water Year 2019 Final CVP Accounting of (b)(2) Actions in TAF," summarizes the fishery actions, including WQCP and ESA actions (relative to the hypothetical baseline operations) covered by CVPIA Section 3406(b)(2) in water year 2019. This summary table is based on the final daily accounting for water year 2019. This narrative and table constitute Interior's final accounting of fishery actions, including ESA and WQCP actions, covered by CVPIA Section 3406(b)(2) during water year 2019 and explains how Interior exercised its authority and discretion under CVPIA Section 3406(b)(2) during that same period.

### **Water Year 2019 Fish Actions Covered By (b)(2) Water**

#### **October 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 3.2 TAF of (b)(2) water. Approximately 200 cfs was maintained to help meet AFRP flow objectives for spring-run Chinook egg incubation and rearing, and improved instream conditions for spawning fall-run Chinook salmon. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

#### **November 2018:**

In the Delta, CVP exports were curtailed to an average of approximately 1,804 cfs from Nov. 14-28. Exports were reduced below hypothetical baseline pumping levels by approximately 23.7 TAF to

primarily help meet WQCP NDOI requirements. These export reductions also contributed to help reduce the vulnerability of migrating adult fall-run Chinook salmon and CV steelhead within the lower San Joaquin River. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

**December 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 4.0 TAF of (b)(2) water. Approximately 245 cfs was maintained to help meet AFRP flow objectives to benefit spring-run Chinook fry, steelhead juveniles and pre-spawning adults, and instream conditions for fall-run Chinook salmon spawning and egg incubation. These releases predominantly contributed to the primary purpose of Section 3406 (b)(2).

On the Sacramento River, flows were augmented above the hypothetical baseline using approximately 20.7 TAF of (b)(2) water. Approximately 4000 cfs was maintained to help meet AFRP flow objectives for fall-run and late-fall run Chinook salmon spawning and egg incubation and to benefit steelhead juveniles and pre-spawning adults. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the American River, flows were augmented above the hypothetical baseline using approximately 10.0 TAF of (b)(2) water. Approximately 1800 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook salmon spawning, emergence, and rearing and to benefit steelhead spawning adults, egg incubation, and juvenile rearing consistent with the NMFS BO and the American River FMS. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 3,538 cfs from Dec. 12-18. Exports were reduced below hypothetical baseline pumping levels by approximately 7.8 TAF to primarily help meet WQCP NDOI requirements. These export reductions also contributed to help reduce the vulnerability of migrating adult fall-run Chinook salmon and CV steelhead within the lower San Joaquin River. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

**January 2019:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 12.0 TAF of (b)(2) water. Approximately 245 cfs was maintained to help meet AFRP flow objectives to benefit spring-run Chinook fry, steelhead juveniles and spawning adults, and instream conditions for fall-run Chinook salmon egg incubation and rearing. These releases predominantly contributed to the primary purpose of Section 3406 (b)(2).

On the Sacramento River, flows were augmented above the hypothetical baseline using approximately 24.0 TAF of (b)(2) water. Approximately 3500-4000 cfs was maintained to help meet AFRP flow objectives for fall-run and late-fall run Chinook salmon spawning, egg incubation, and emergence and to

benefit steelhead juveniles and spawning adults. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the American River, flows were augmented above the hypothetical baseline using approximately 37.0 TAF of (b)(2) water. Approximately 1750 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook salmon egg incubation, emergence, and rearing and to benefit steelhead spawning adults, egg incubation, and juvenile rearing consistent with the NMFS BO and the American River FMS. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 3,576 cfs to assist in moderating flow and turbidity from both the Sacramento and San Joaquin Rivers into the central and south Delta to reduce the vulnerability of juvenile salmonid entrainment to the export facilities. as part of the NMFS BO Action IV.2.3 (OMR management). During that period, CVP exports were reduced below hypothetical baseline pumping levels by approximately 33.4 TAF. These export reductions predominantly contributed to the primary purpose of Section 3406 (b)(2).

**February 2019:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 8.1 TAF of (b)(2) water. Approximately 245 cfs was maintained to help meet AFRP flow objectives to benefit spring-run Chinook fry, steelhead juveniles and spawning adults, and instream conditions for fall-run Chinook salmon juvenile rearing. These releases predominantly contributed to the primary purpose of Section 3406 (b)(2).

On the American River, flows were augmented above the hypothetical baseline using approximately 0.5 TAF of (b)(2) water. Approximately 1750 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook salmon juvenile rearing and to benefit steelhead spawning adults, egg incubation, and juvenile rearing consistent with the NMFS BO and the American River FMS. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the Stanislaus River, flows were augmented above the hypothetical baseline using approximately 13.7 TAF of (b)(2) water. Approximately 600-1500 cfs was maintained as specified in the winter instability flow schedule contained in the NMFS BO RPA III.1.3 for steelhead juvenile outmigration and to help meet AFRP flow objectives for fall-run Chinook rearing and outmigration. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 3,819 cfs to assist in moderating flow and turbidity from both the Sacramento and San Joaquin Rivers into the central and south Delta to reduce the vulnerability of juvenile salmonid entrainment to the export facilities. as part of the NMFS BO Action IV.2.3 (OMR management). During that period, CVP exports were reduced below hypothetical baseline pumping levels by approximately 22.1 TAF. These export reductions predominantly contributed to the primary purpose of Section 3406 (b)(2).

**March 2019:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 12.0 TAF of (b)(2) water. Approximately 245 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook salmon rearing and emigration and steelhead spawning and emergence. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

**April 2019:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 11.7 TAF of (b)(2) water. Approximately 245 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook, late fall-run Chinook, and steelhead juvenile rearing and outmigration. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 1613 cfs to assist in meeting the San Joaquin Inflow to Export ratio contained in the NMFS BO RPA IV.2.1. During that period, CVP exports were reduced below hypothetical baseline pumping levels by approximately 109.3 TAF to reduce the vulnerability of emigrating juvenile fall-run Chinook salmon and steelhead within the lower San Joaquin River to entrainment into the channels of the South Delta and at the pumps. These export reductions predominantly contributed to the primary purpose of CVPIA 3406(b)(2).

**May 2019:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 12.0 TAF of (b)(2) water. Approximately 200-250 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook, late fall-run Chinook, and steelhead juvenile rearing and outmigration, as well as for spring-run Chinook attraction flows in accordance with NMFS RPA I.1.1. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 1,408 cfs to assist in meeting the San Joaquin Inflow to Export ratio contained in the NMFS BO RPA IV.2.1. During that period, CVP exports were reduced below hypothetical baseline pumping levels by approximately 91.9 TAF to reduce the vulnerability of emigrating juvenile fall-run Chinook salmon and CV steelhead within the lower San Joaquin River to entrainment into the channels of the South Delta and at the pumps. These export reductions predominantly contributed to the primary purpose of CVPIA 3406(b)(2).

**June 2019:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 7.7 TAF of (b)(2) water. Approximately 150-200 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook, late fall-run Chinook, and steelhead juvenile rearing and outmigration, as well as for spring-run Chinook attraction flows in accordance with NMFS RPA I.1.1. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 1,697 cfs in early June to assist in meeting the San Joaquin Inflow to Export ratio contained in the NMFS BO RPA IV.2.1. During that period, CVP exports were reduced below hypothetical baseline pumping levels by approximately 13.9 TAF to reduce the vulnerability of emigrating juvenile fall-run Chinook salmon and CV steelhead within the lower San Joaquin River to entrainment into the channels of the South Delta and at the pumps. These export reductions predominantly contributed to the primary purpose of CVPIA 3406(b)(2).

**July 2019:**

none

**August 2019:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 3.4 TAF of (b)(2) water. Approximately 150 cfs was released to help meet AFRP flow objectives for spring-run Chinook spawning and egg incubation and for steelhead juvenile rearing and outmigration. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

**September 2019:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 8.2 TAF of (b)(2) water. Approximately 150-275 cfs was released to help meet AFRP flow objectives for spring-run Chinook spawning and egg incubation, steelhead juvenile rearing, and water temperature management contained in the NMFS BO. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the Stanislaus River, flows were augmented above the hypothetical baseline using approximately 6.0 TAF of (b)(2) water. Approximately 400 cfs was maintained as specified in the flow schedule contained in the NMFS BO RPA III.1.3 for steelhead juvenile rearing. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).